

COLORADO RIVER RECOVERY PROGRAM
FY 2004 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: 133

I. Project Title: Evaluation of the Yampa Humpback Chub Population.

II. Principal Investigators:

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III. Project Summary:

The recovery goals for humpback chub require no “net loss” in the size of existing humpback chub populations, and a monitoring program to measure the status of these populations. The Yampa River population of humpback chub is one of the smallest populations of existing humpback chub. The recommendation from the recent RIP population monitoring workshop was that abundance estimates were very important relative to monitoring progress toward recovery. Another issue raised by the recovery goals, is what is the distribution of the ‘Yampa’ population. The recovery goals state that what is now referred to as the Yampa population also include fish that may be found in Lodore, Whirlpool, and Split Mountain canyons. The recent discovery of age-0 and age-1 humpback chub (Chris Kitcheyan, USFWS, Daryl Snyder, CSU, Personal Communication) in Island Park give support to the presence of humpback chub in at least Whirlpool Canyon, and historical records have documented captures of humpback chub in both Split Mountain and Lodore canyons. This project is the first attempt to sample the distribution of humpback chub in all the suspected locations occupied by humpback chub in a given year and will provide the baseline distributional information for these sites for future monitoring efforts. This is the last year of a two year study.

IV. Study Schedule: 2003 to 2005

V. Relationship to RIPRAP:

Green River Action Plan: Yampa and Little Snake Rivers: V.A. Conduct population estimate for humpback chub.

VI. Accomplishments of FY 2003 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Sampling for humpback chub was attempted in Lodore, Whirlpool, and Split Mountain Canyons (RMI 364-219) as well as Yampa Canyon (RMI 0-47) (Table 1). Two electrofishing passes were made in Lodore Canyon, two netting passes and four electrofishing passes were made in Whirlpool and Split Mountain Canyons, and four electrofishing passes were made in the Yampa River. Additional data were provided from four volunteer angling trips made in Yampa Canyon for the purposes of nonnative fish removal.

A total of nine adult humpback chub were captured throughout our sampling effort, all in Yampa Canyon (Table 2). Thirty two seine samples of juvenile fish were taken and will analyzed this winter. Data from seventeen seine samples collected in 2003 revealed a 95% nonnative fish composition in backwater and other slow water habitats from both Island Park and Yampa Canyon (Table 3). However, 232 of the 255 native fish collected were of one taxa (flannelmouth sucker) and came from two samples (two separate isolated pools in Lily Park).

Unlike last year, no humpback chubs were caught during this study in Whirlpool Canyon. Other investigators have captured humpback chub in Whirlpool Canyon in 2004 (Bestgen et al. Recovery Program Project 115).

VII. Recommendation:

1. Complete annual report.
2. Localize future sampling efforts in order to capture more humpback chubs and provide better estimates of population size and structure.

VIII. Project Status:

The project is ongoing and subject to review prior to continuation.

IX. FY 04 Budget Status:

- A. Funds provided: \$99,960
- B. Funds expended: \$99,960
- C. Difference: -0-
- D. Percent of the FY 2004 work completed: 100
- E. Recovery Program funds spent for publication charges: -0-

X. Status of Data Submission:

Data will be sent to the database manager upon completion of the project in 2004. Data are currently being entered in Microsoft™ Excel spreadsheets.

XI. Signed: Sam Finney
Principal Investigator

November 8, 2004
Date

Table 1. Summary of humpback chub sampling dates, 2004.

Lodore Canyon	Split Mountain/ Whirlpool Canyon	Yampa Canyon
9/20 – 9/23	8/3 – 8/5	4/14 – 4/17
7/26 – 7/29	8/16 – 8/18	6/1 – 6/4
	9/7 – 9/9	6/7 – 6/10
	9/13 – 9/16	6/14 – 6/17
		6/21 – 6/24
		6/28 – 7/1
		7/12 – 7/16
		7/19 – 7/22

Table 2. Summary of humpback chub captured during 2004 sampling efforts.

<u>Date</u>	<u>Length</u>	<u>Weight</u>	<u>Recapture</u>	<u>PIT Tag #</u>	<u>River Mile/Reach</u>	<u>Gear^a</u>
4/14/2004	250	114	No	425B62135F	38.3	EF
4/15/2004	320	284	No	42684F7949	24.4	EF
6/8/2004	264	144	No	426A125717	24.5	EF
6/16/2004	260	140	No	42697D6C76	15.1	EF
7/16/2004	N/A	N/A	N/A	N/A	4.3 to 0	AN
6/23/2004	N/A	N/A	N/A	N/A	37 to 32.4	AN
6/23/2004	N/A	N/A	N/A	N/A	37 to 32.4	AN
6/21/2004	289	N/A	N/A	N/A	40.9 to 37	AN
6/23/2004	373	N/A	N/A	N/A	28 to 24.5	AN

^a AN= Angling, EF = electrofishing,

Table 3. Summary of humpback chub juvenile seining samples for 2003.

<u>Species</u>	<u>Number Collected in Island Park</u>	<u>Number Collected in Yampa River</u>	<u>Total</u>
Red Shiner ^a	2103	231	2334
Red Side Shiner ^a	3	0	3
Sand Shiner ^a	1643	182	1825
Fathead Minnow ^a	101	8	109
Bullhead Catfish ^a	1	2	3
Smallmouth Bass ^a	0	1	1
<i>Gila spp.</i> ^b	0	9	9
Flannelmouth Sucker	2	235	237
Common Carp ^a	0	7	7
Rio Grande Killifish ^a	11	37	48
Longnose Dace	1	7	8
Bluehead Sucker	0	1	1
Bluegill Sunfish ^a	0	1	1
Green Sunfish ^a	12	0	12

^a Non native, ^b to be identified to species